



UNITED STATES PATENT AND TRADEMARK OFFICE

llc
UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/364,159	07/30/1999	KOJI SUZUKI	YKI-0014	9014
23413	7590	06/14/2005		EXAMINER
CANTOR COLBURN, LLP			SCHECHTER, ANDREW M	
55 GRIFFIN ROAD SOUTH				
BLOOMFIELD, CT 06002				
			ART UNIT	PAPER NUMBER
			2871	

DATE MAILED: 06/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/364,159	SUZUKI ET AL.	
	Examiner	Art Unit	
	Andrew Schechter	2871	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 24 January 2005.

2a) This action is FINAL. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 2,3,6 and 12-15 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 2,3,6 and 12-15 is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on 30 July 1999 is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some * c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) <input type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____.
3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>1/24/05</u> .	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____.

DETAILED ACTION

Double Patenting

1. A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

2. Claims 2 and 6 are provisionally rejected under 35 U.S.C. 101 as claiming the same invention as that of claims 1 and 2, respectively, of copending Application No. 11/008,030 (see US 2005/0099560). This is a provisional double patenting rejection since the conflicting claims have not in fact been patented.

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Art Unit: 2871

4. Claims 3, 14, and 15 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of copending Application No. 11/008,030. Although the conflicting claims are not identical, they are not patentably distinct from each other because the use of Al to make the display electrode and Mo, Ti, W, Ta, or Cr to make the back-surface electrode were well-known in the art (of which the examiner takes official notice) and it would have been obvious to one of ordinary skill in the art at the time of the invention to do so in the device of copending claim 1, motivated by the high reflectivity of Al and the good effect of such metals as underlayers of Al, for instance. Claims 3 and 15 are therefore rejected. The listed high-melting point metals are non-oxide metals, so claim 14 is also rejected.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

5. Claims 12 and 13 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 9 and 12 of copending Application No. 11/008,030. Although the conflicting claims are not identical, they are not patentably distinct from each other because copending claims 9 and 12 anticipate claim 12 and 13, respectively.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claims 2, 3, 6, and 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Mizuno et al.*, U.S. Patent No. 6,011,605 in view of *Shimada et al.*, U.S. Patent No. 5,182,620.

[The *Mizuno* reference has a filing date of 3 August 1998, so this rejection might possibly be overcome with the submission of a certified translation of the applicant's priority document, perfecting a priority date of 31 July 1998.]

Mizuno discloses [see Figs. 1 and 2, for instance] a reflective liquid crystal display device on which display is created by reflecting light incident from the display observation side, comprising: a display electrode [20] made of a reflective material [Al alloy] for reflecting the incident light on a surface thereof; a back-surface electrode [21] disposed in contact with a back surface of the display electrode; a transistor for controlling current to the display electrode, said back-surface electrode and the transistor being electrically interconnected wherein the transistor is a thin-film transistor [col. 6, lines 21-28, for instance]; wherein said display electrode and said back-surface electrode are patterned into the same shape [see Fig. 2, for instance], and a thickness of said back-surface electrode is such that no substantial protrusion is formed in said

display electrode [see Fig. 2, for instance], the thickness being 500 Angstroms [col. 5, lines 5-6], and made of a high melting point metal [Ti, col. 5, lines 5-6].

Mizuno does not explicitly disclose that the TFT has an active layer, and a portion of the back-surface electrode is directly connected to said active layer via a contact hole; it is silent on these details. A TFT having these features is disclosed by *Shimada* [see Fig. 2]; it would have been obvious to one of ordinary skill in the art at the time of the invention to use such a TFT in the device of *Mizuno*, motivated by the desire to have a TFT which controls the current to the pixel electrode without unnecessary layers between the active layer and the back-surface electrode. Claim 2 is therefore unpatentable.

Mizuno's display electrode is Al and back-surface electrode is Ti, so claims 3, 14, and 15 are also unpatentable. *Shimada* discloses using a polysilicon active layer, and it would have been obvious to one of ordinary skill in the art at the time of the invention to use polysilicon motivated by their being fast and allowing CMOS construction [col. 2, lines 20-26, for instance], so claim 6 is also unpatentable.

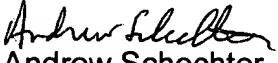
Considering the additional limitations of claim 13, *Shimada* discloses a polysilicon TFT covered by an insulating layer, and the back-surface electrode formed on a smoothened film; it would have been obvious to one of ordinary skill in the art at the time of the invention to use such a smoothened film, motivated by the desire to keep the surface for the liquid crystal as flat as possible so as not to disturb the orientation of the liquid crystal molecules. Claim 13 is therefore unpatentable as well.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew Schechter whose telephone number is (571) 272-2302. The examiner can normally be reached on Monday - Friday, 9:00 - 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert H. Kim can be reached on (571) 272-2293. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Andrew Schechter
Primary Examiner
Technology Center 2800
2 June 2005